(1) Publication number:

**0 268 946** A3

(12)

## **EUROPEAN PATENT APPLICATION**

21 Application number: 87116713.6

22 Date of filing: 12.11.87

(1) Int. Cl.5: C07H 1/08 , C12N 15/00 , C12P 19/34

39 Priority: 22.11.86 DE 3639949

② Date of publication of application: 01.06.88 Bulletin 88/22

Designated Contracting States:
 AT BE CH DE FR GB IT LI LU NL SE

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Method for separating long-chain nucleic acids.

(57) Long-chain nucleic acids are separated from other substances from solutions containing nucleic acids and other materials, and more particularly nucleic acid/protein mixtures from biotechnical preparations from bacteria, viruses, animal and vegetable tissues and cells as well as body liquids, more particularly cell ingredients and/or degradation products thereof as well as components of body liquids which components are not long-chain nucleic acids, by that the long-chain nucleic acids in the nucleic acid-containing solutions, or after disintegration under mild conditions of the tissue cells and/or cells from body iquids are fixed on a porous matrix, whereas the Nsubstances to be separated therefrom are washed out from the matrix, and the fixed nucleic acids, if desired, are subsequently removed from the matrix. A device for carrying out the method preferably consists of a cartridge (1) containing the porous matrix (11) and having at least one inlet opening (3)

and at least one outlet opening (4).

## **EUROPEAN SEARCH REPORT**

EP 87 11 6713

				EP 87 11 67	
)	DOCUMENTS CONSI	DERED TO BE RELEVA	ANT		
Category	Citation of document with in of relevant pas	dication, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)	
Х	PHARMACIA, FPLC SYS PERFORMANCE PURIFICA BIOMOLECULES, Septer 2-46, Rahms i Lund, * Pages 26-29 *	ATION OF mber 1986, pages	1-32	C 07 H 1/08 C 12 N 15/00 C 12 P 19/34	
Y	PHARMACIA, FPLC: MEI GUIDE, HIGH PERFORM BIOMOLECULES, pages * Pages 6,18 *	ANCE SEPARATION OF	1-32		
Y	PATENT ABSTRACTS OF 13 (C-397)[2460], 1 JP-A-61 187 793 (SA CENTER) 21-08-1986 * Abstract *	JAPAN, vol. 11, no. 4th January 1987; & GAMI CHEM. RES.	1-32		
P,X	EP-A-0 240 191 (SE INC.)		1		
	* Abstract; column claim 3 *	1, lines 52-55;			
				TECHNICAL FIELDS SEARCHED (Int. Cl.4)	
				C 07 H 1/00 C 07 H 21/00 C 12 N 15/00 C 12 P 19/00	
	The present search report has b	Date of completion of the search	1	Examiner	
THE HAGUE 16-11-		16-11-1989	-1989 SCOTT J.R.M.		
X: par Y: par doc A: tec O: no	CATEGORY OF CITED DOCUMENT ticularly relevant if taken alone ticularly relevant if combined with and nument of the same category hnological background n-written disclosure ermediate document	E : earlier pate after the fil other D : document c L : document c	T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons  &: member of the same patent family, corresponding document		

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